NOTES OF A TRIP TO MOUNT SEAVIEW, UPPER HASTINGS RIVER.

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In ordinary weather, looking west from Port Macquarie, one sees a conical peak in the clouds, perhaps sixty miles away, which is a beautiful object, particularly at the time of the setting sun. This is what is usually pointed out to visitors as Mt. Seaview, but few persons have been close to it, and I could not interview anyone who had ascended it. It is a topographical feature of much interest.

I ascended Mt. Seaview in November last, doing Oxley's celebrated journey from the Apsley to Port Macquarie in a reverse direction. In another paper, which will appear in the Agricultural Gazette of N.S.W., I have given a popular account of my trip, with especial reference to the plants observed in the Mount Seaview District. As the information is not repeated in the present paper, the attention of those interested in the subject is invited to it.

Mt. Seaview was discovered by Oxley on September 23rd, 1818, and the name was given on account of the magnificent view of the ocean to be obtained from the summit. He left Bathurst on the 28th May, and followed the Macquarie down to Mt. Harris; he then turned eastward, crossing the Castlereagh just above where Coonamble now stands. He ascended the Warrumbungle Mountains (named by him Arbuthnot Range), and, still travelling east, he crossed the Peel River near its junction with the Cockburn. He next discovered the Bathurst Falls and Apsley River, and, after some terrible experience in the scrubby ranges, he came on "Sea View Mount," with the Hastings flowing at its foot. The following extract from his Journal may be interesting as showing his method of obtaining the height of

the mountain:—"I estimate the height of this mountain at between 6,000 and 7,000 feet, and yet the country north and south appeared equally elevated. . . . The length of the descent was two measured miles and three-quarters, and, upon first, an angle of depression of 40 degrees for 1,254 feet, we then slightly ascended 4 to 6 degrees for 4,620 feet, and from thence the descent in a continued straight line to the run of water at the base was on various angles of 28, 32, 35, 40 and 46 degrees —8,580 feet, from which I deduce the perpendicular height to be nearly 6,000 feet, which is certainly underrated."

As far as I can ascertain, no mountain has been officially called Mt. Seaview, other than Kookamerican, and this appears to be probably Oxley's Sea View, but having carefully studied the explorer's account of his journey, I cannot yet state that I feel that the particular mountain is settled beyond all doubt. The country is difficult and very mountainous, some of the mountains being difficult to define, requiring extended acquaintance.

I desire at this place to thank Mr. Gerald H. Halligan, Chief Surveyor, Public Works Department, for his kindness in devoting much time to hunting up official fecords in regard to Mt. Seaview, and in placing the results of his investigations at my disposal.

The great height quoted by Oxley is the foundation for the statements made in more recent maps and text-books. Baron von Mueller requested me to undertake the ascent of the mountain in 1884, believing that a rich harvest of plants would be the result of exploration of so elevated a region, and, although in later years he must have been aware that the height of the mountain is only about one-half of what it was formerly supposed to be, he still desired the ascent to be made.

On a map of the County of Macquarie, published by the Lands Department, August, 1873, Mt. Sea View or Kookamerican is stated to be 6,700 feet high. On a map of "Continental Australia," by A. J. Skene, Surveyor-General of Victoria, and engraved by W. Slight, dated December, 1885, the height of Seaview is

^{*} Journal of an Expedition, &c. (London, 1820).

given as 6,000 feet. Banks' school map of New South Wales, adopted by the Government of New South Wales for use in State schools, and dated 1891, gives the height as 6,000 feet.

"Mt. Seaview I found to be 3,100, and not 6,700 feet as recorded on county map of Macquarie. It is not at all prominent from the north-west or south, the ranges on these sides being as high or higher than it. The range near the ^{TP}₅ (Taree and Port Macquarie) tree is 700 feet higher, and at the Myrtle Scrub at the junction of Mt. Seaview with Main Range is 1,200 feet higher." [Report of Mr. Surveyor Graeme, 9th May, 1890.]

In accordance with the above determination, the height is given at 3,100 feet on the map of the County of Hawes, published by the Lands Department in 1894.

Mr. J. F. Campbell, L.S., of Walcha, who accompanied me to Mt. Seaview, has furnished me with the following statement:—

"Until recent years the true position of Mt. Sea View was unknown to the Survey Department. Previously to 1889 (the date of its location by survey) the Department of Lands on two occasions at least sent staff officers from the tableland to fix its position, but success did not exown their efforts. In 1889 a staff surveyor was sent from Port Macquarie on the same errand, and with the assistance and information afforded by local residents, fixed on the present mountain as the Sea View of Oxley and others. Mt. Sea View is by no means the highest portion of the spur of which it forms the most easterly termination. The Sea View spur (about 15 miles long) descends from the tableland at the Myrtle Scrub (about 4.000 feet above sea level) and undulates in an easterly direction to the Hastings River, terminating in the more indurated altered slate of Mt. Sea View (3,100 feet). The spur is an off-shoot from the main water-shed of the Manning and Hastings Rivers, and sheds the waters of Tobin's and Fenwick's Creeks on their upper reaches, and Tobin's and Maiden's Creek below. Mount Forsyth forms the termination of the spur (on which is situated Mt. Maiden) coming out of the Sea View spur about 8 or 9 miles from the Myrtle Scrub. This spur sheds the waters of Fenwick's and Maiden's Creeks."

As I approached Seaview or Kookamerican (which is the native name of the mountain officially recognised as Mt. Seaview, and now a trigonometrical station), I found that residents of this sparsely populated district, perhaps disappointed at the height of Kookamerican, advanced claims in favour of three other heights to be considered Oxlev's Seaview. They were: -(1) A mountain about three miles to the north-west of Kookamerican, and which is undoubtedly higher than Seaview. I have described this mountain in detail in an article to be published in the Agricultural Gazette of N.S.W., to which I have already referred. (2) A coasting captain pointed out as the "Sailors' Mt. Seaview" what Mr. Nivison, of Yarrowitch Station, recognised as the 2-mile siding, Myrtle Scrub. The Myrtle Scrub is referred to in the paper just quoted, and it is considerably higher than Seaview (Mr. Surveyor Graeme says 1,200 feet). The siding can be observed because of its prominence, and Mr. Nivison knows this part of the country well. (3) Banda Banda Mountain, Macleay District, but I do not entertain it for a moment, as this opinion can only be held by persons who have not studied Oxley. No. 1 is quite possible, but No. 2 cannot be supported owing (if for no other reason) to its distance from the river called the Hastings by Oxley.

The paper in the Agricultural Gazette contains a general account of the botany of the country about Mt. Seaview, and some account of the plants met with in ascending it, but following is a list of the plants collected on the very summit. Casual examination will show that they possess no interest apart from the locality in which they were found. They show at once that the elevation is not alpine, and not nearly alpine. The locality has not been previously visited by a botanist.

The two principal grasses are *Poa cæspitosa*, Forst., and Blady Grass (*Imperata arundinacea*, Cyr.); *Xerotes longifolia*, R.Br., and Bracken (*Pteris aquilina*, Linn., var. *esculenta*) were also very abundant, and these four plants covered the greatest area of ground. In addition there were *Cyperus* (probably *C. platystylis*, R.Br., but the nuts are scarcely ripe), and a grass, *Panicum*

marginatum, R.Br., var. strictum, identical with the figure in Trinius' Spec. Gram. ii. t. 179. There was a tree-fern (Alsophila australis, R.Br.) and a squatty fern (Todea barbara, T. Moore), on the summit, while Lepidosperma laterale, R.Br., Dianella lavis, R.Br., and Gymnostachys anceps, R.Br., were not rare.

There were not many trees either in number of species or of individuals. The Blackbutt referred to in the official report of the surveyor, who fixed the beacon on Mt. Seaview alongside it, is not a true Blackbutt, but a Peppermint (*Eucalyptus amygdalina*, Labill.), and must not be confused with the true Blackbutt (*E. pilularis*), which may be found lower down the mountain. This Peppermint is not rare on the higher parts of these ranges, and fills the air with an agreeable odour.

A more interesting tree at this elevation was a specimen of the Brush Box, Tristania conferta, R.Br., which had, however, rather suffered from the wind. At the beacon was the Blueberry tree (Elaeocarnus cyaneus, Ait.), while there were several Honeysuckles (Banksia integrifolia, Linu., f.). Amongst shrubs there were Persoonia lucida, R.Br., and P. linearis, Andr., Lomatia silaifolia, R.Br., and Hakea eriantha, R.Br., with narrow leaves up to 8 inches long (all belonging to the Proteaceæ); Westringia glabra, R.Br., and Prostanthera nivea, A. Cunn., both labiate plants well worthy of cultivation because of their pleasing lavendercoloured flowers. Solanum violaceum, R.Br., with green globular fruit, and forming a straggling shrub of 6 feet, was abundant, and so was the graceful Leucopogon lanceolatus, R.Br., belonging to the Epacrideæ. The Compositæ were represented by Cassinia longifolia, R.Br., and its yellow-flowered variety straminea; also Olearia chrysophylla, A. Cunn.; the two latter plants are very ornamental. Of Hibbertias there were H. volubilis, Andr., and also a pubescent form of H. dentata, R.Br. Amongst the Leguminosæ there were Oxylobium trilobatum, F.v.M., (the so-called Native Holly), and Indigofera australis, Willd., var. signata (one of our native Indigos).

I collected a few lichens on the trip, which were kindly determined by Revd. F. R. M. Wilson as Parmelia cetrata, Ach.,

Anzia angustata, Pers., Parmelia polycarpa, Taylor, and P. tenuissima, Taylor, all from Mt. Seaview; Lecidea ferax, Muell. Arg., Mt. Maiden; Usnea barbata, Linn., var. ceratina, Hastings River; Cladonia fimbriata, Huds., Long Flat, Hastings River; and Parmelia conspersa, Ehr., Tia, New England.

On the tops of mountains higher than Mt. Seaview, and also in situations not much higher than the Hastings River, I found an arboreal Daviesia. It is a handsome tree with drooping branches. On the average it was, say, 25 feet high, with a trunk diameter of 1 foot. It had corky, deeply furrowed bark, and white wood. In habit it reminds one of Acacia implexa, and the bark might readily be mistaken for Casuarina suberosa or C. torulosa. I was under the impression that this Daviesia had not been previously recorded from New South Wales, but the Rev. B. Scortechini (loc. cit. infra) traced it to the Tweed River from Queensland. It was imperfectly described by W. Hill as No. 219, page 22, of his Catalogue of the Collection of Queensland Timbers, published for the Sydney International Exhibition of 1879. He describes it as "Queenwood. Diameter, 6 to 12 inches; height, 15 to 30 feet. A very ornamental, spreading, drooping tree, with bright green foliage; occurring upon the Darlington Ranges. Its wood is hard, close-grained, with beautiful pink streaked lines, and takes a beautiful polish. It is destined to take a prominent position with cabinet-makers, also for decorative plantations."

In the Proceedings of this Society, Vol. vii p. 221, in a paper by Rev. B. Scortechini, the name Daviesia arborea is adopted as of "F.v.M. and B. Scort., ined."; and although the tree is described more fully than by Hill, it is not described in a formal botanical manner by either, and if the name arborea should stand for it, W. Hill must be given as the author. D. arborea, F.v.M. and Scort., was quoted in Mueller's Census (1st Edition, 1882), and suppressed in the 2nd Edition (1889) of the same work, being included under D. corymbosa. I certainly think reference should be made to its tree-stature, so unusual in the genus, and therefore propose that it be called D. corymbosa, var. arborea.

Potamophila parviflora, R.Br., is an interesting grass, the genus comprising but one species endemic in Australia. Bentham (B.Fl. vii. 550) records it from "Williams River, R. Brown; Hastings River, Beckler; the specimens few, and not seen in any other collection." I found it in fair quantity both in the Upper and Lower Hastings. It is a tall, pale-coloured, erect, cane-like grass, forming large tussocks in the water often several feet in diameter. It is cropped by cattle wherever they can reach it, and is probably a nutritious grass. It occurs in the stony bed of the limpid stream, always more or less submerged, probably because cattle have eaten it out close to the bank.

I now proceed to give some account of the Eucalypts found on Mt. Seaview.*

Eucalyptus amygdalina, Labill.—This tree (Peppermint) occurs on the summits of Mt. Seaview and of the other mountains visited, being very plentiful in some places. The bark is rough at the butt, and more or less blackish, hence it is sometimes called Blackbutt, but it must not be confused with the true Blackbutt (E. pilularis). The tree at the beacon on the summit of Mt. Seaview, and officially referred to as Blackbutt, is E. amygdalina. No seedlings or suckers were available, and barely ripe fruit, but I do not doubt that the form of E. amygdalina on these ranges is the var. latifolia (Deane and Maiden) described in the Proc. of this Society [x. (2nd Ser.) 609]. The foliage and fruits (which are shiny) are strikingly like those of trees in the southern highlands, e.g., Queanbeyan, Delegate, also in the Mudgee district and the highest parts of the Blue Mountains.

This form from Mt. Seaview closely resembles the form formerly described by Mueller as *E. dives*.

E. acmenoides, Schau. (White Mahogany).—There occurs on the sides of Mount Seaview a small-fruited form, with fruits up to $\frac{1}{4}$ inch in diameter and $\frac{1}{8}$ inch deep.

^{*} I have dealt with the Eucalypts found on the New England table-land during this trip in a paper read before the Australasian Association for the Advancement of Science in Sydney in January last.

E. pilularis, Sm. (Blackbutt), occurs near the summit of Mt. Seaview and adjacent heights. The fruits are perhaps a little smaller than is usual in the species.

E. Sieberiana, F.v.M.—There is a tree, which is sometimes called "Messmate," which occurs near the summit of Mt. Seaview and also on Mt. Maiden, Seaview Range. It is similar to that collected by me in the Glenfernie Forest Reserve* and other places along the Grafton-Armidale road. Mr. Henry Deane has collected it at the Bluff River, Tenterfield. The bark is persistent on the trunk; the branches and branchlets are smooth. At present this tree had better be classified with E. Sieberiana, but in the shape and rim of the fruit, and in some other respects, the tree shows affinities to E. hæmastoma. It may turn out to be a new species, and is under examination.

E. eugenioides, Sieb., and E. capitellata, Sm.—The Stringybarks on the Seaview Range are interesting.

E. eugenioides occurs nearly on the summit of Mt. Seaview. It has globular heads of about $\frac{7}{16}$ inch in diameter, composed usually of 9 or 10 small pale-coloured fruits about $\frac{3}{16}$ inch in diameter.

The Stringybark on the range ascending to New England had fruits much of the same character except that both heads and individual fruits are a little larger, and since they contain one or two more fruits to the head, the individual fruits are more compressed, after the fashion of *E. capitellata*.

Usually the Stringybarks have not the fruits in compact globular heads; those mostly found on the table-land, and also from the Upper Hastings, near Mt. Seaview, are $\frac{4}{16}$ or $\frac{5}{16}$ inch in diameter, six or seven in a loose head, and each fruit with a distinct pedicel.

Other specimens from Yarrowitch, New England, are small and few in the head.

^{*} See Agricultural Gazette of N.S.W. September, 1894, p. 612.

E. macrorrhyncha, F.v.M.—Near the summit of Mt. Seaview there occurs a Stringybark with large fruits undoubtedly belonging to this species. The fruits are similar to those collected by Mr. R. T. Baker, Gulf Rd., Rylstone,* except that the rim is a little more domed and the valves a little more exserted, probably because the Seaview specimens are a little riper. In my opinion Mr. Baker's specimens are now undoubtedly to be referred to E. macrorrhyncha, a point in regard to which Mr. Deane and myself had some doubt (loc. cit.).

NOTES AND EXHIBITS.

Mr. Fred. Turner exhibited a collection of indigenous economic plants collected on the Liverpool Plains.

^{*} See Proc. Linn. Soc. N.S.W. 1896, p. 803.